

FIGURE 1

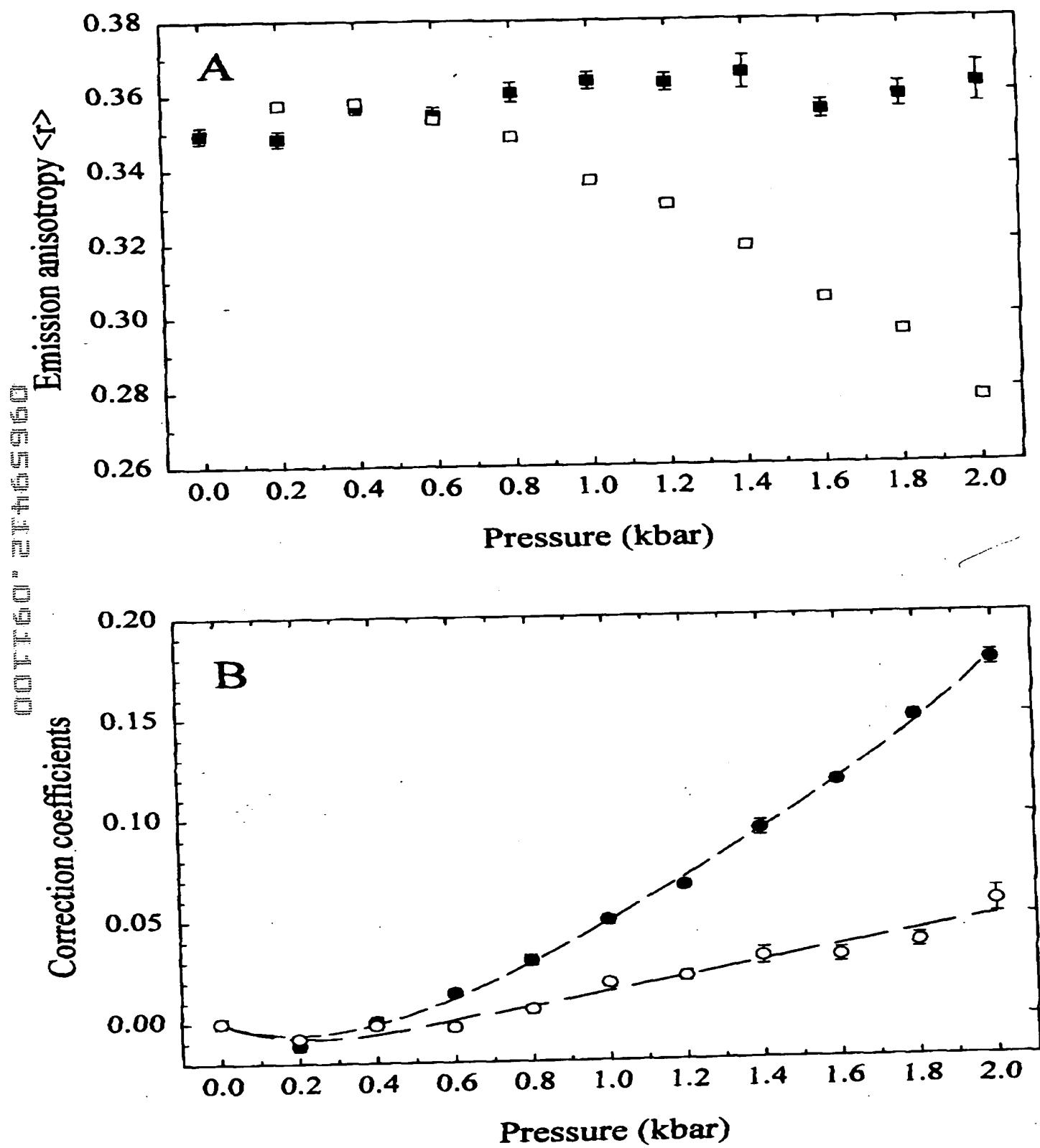


FIGURE 2-

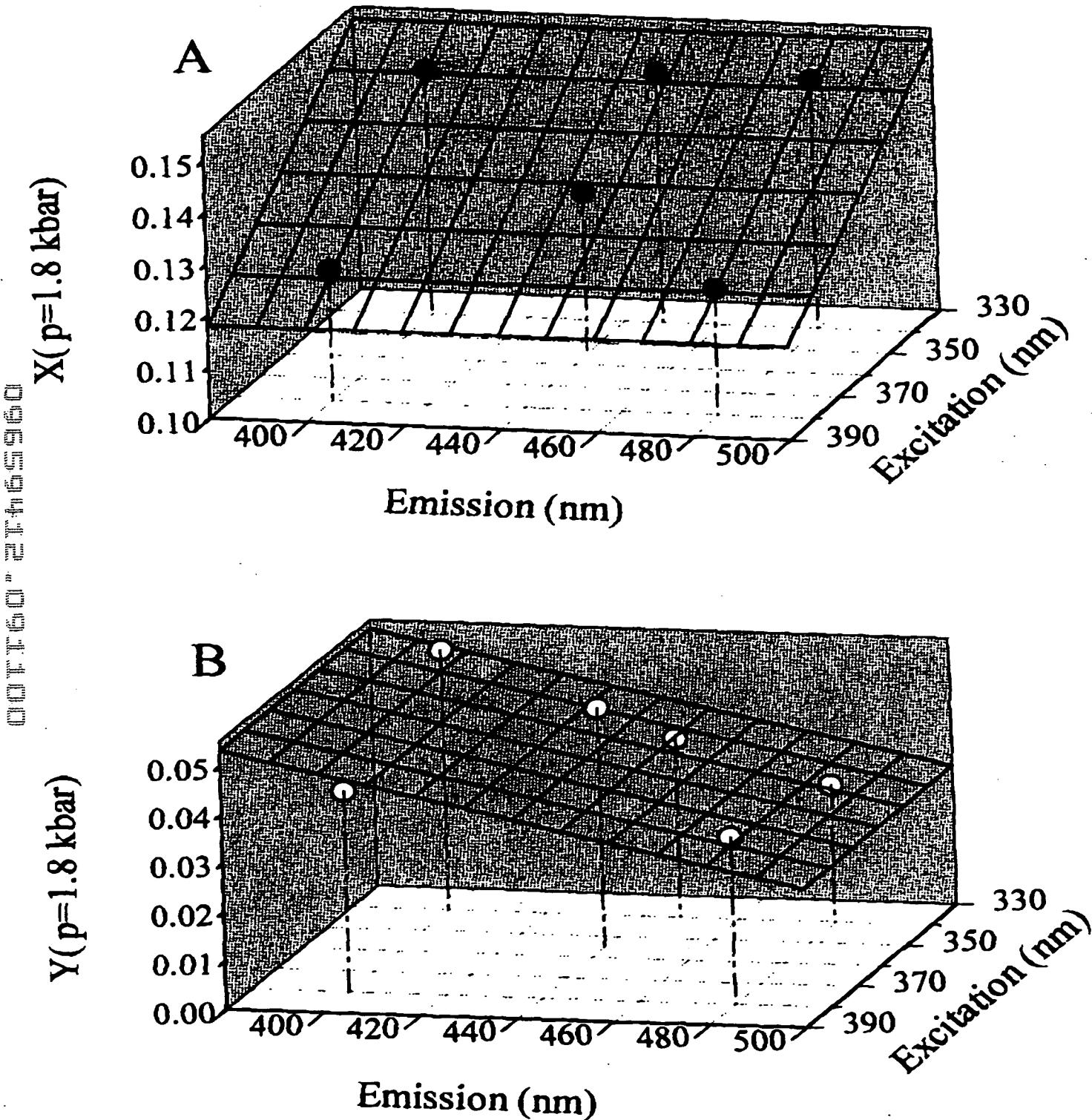


FIGURE 3

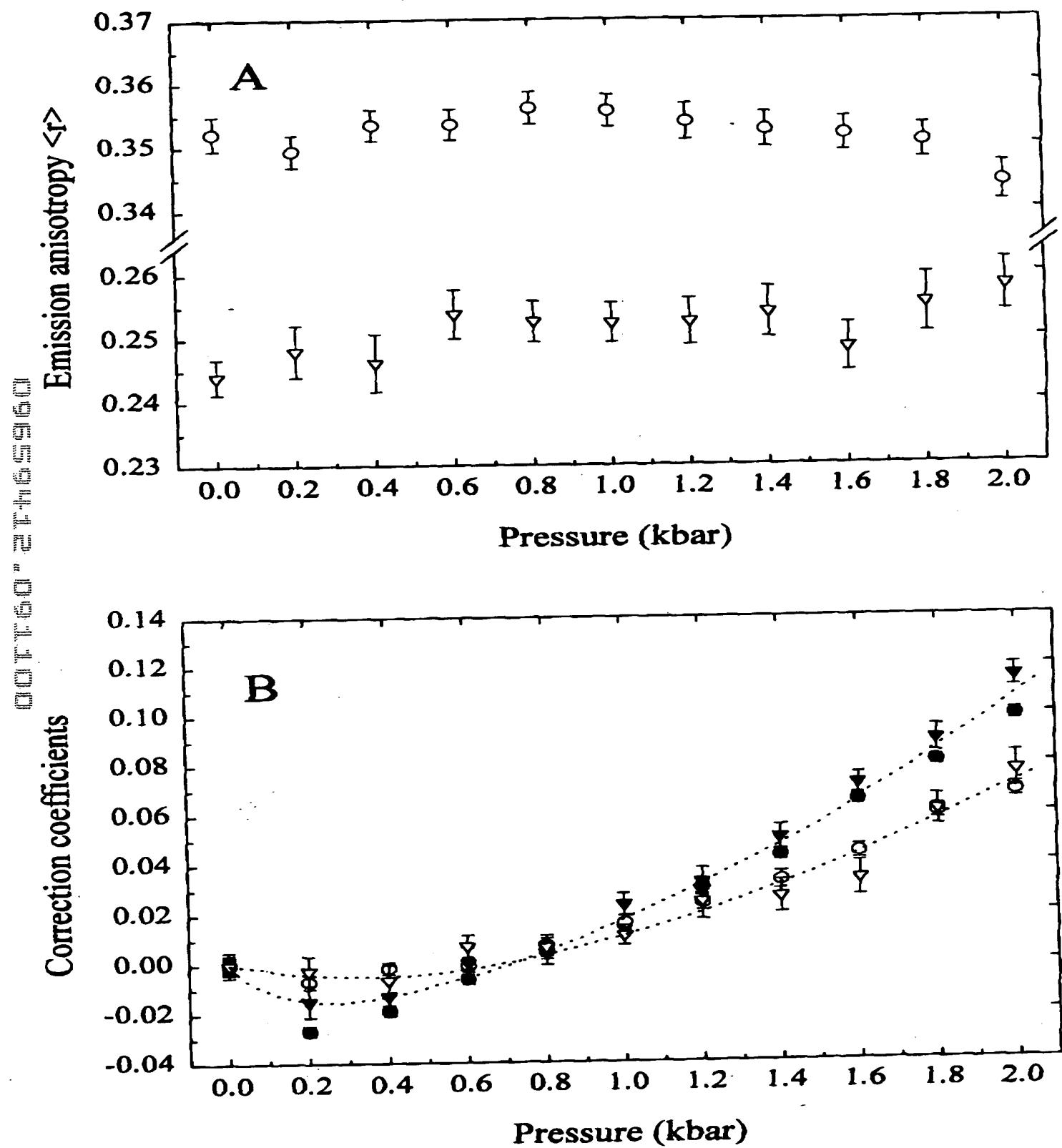


FIGURE 4

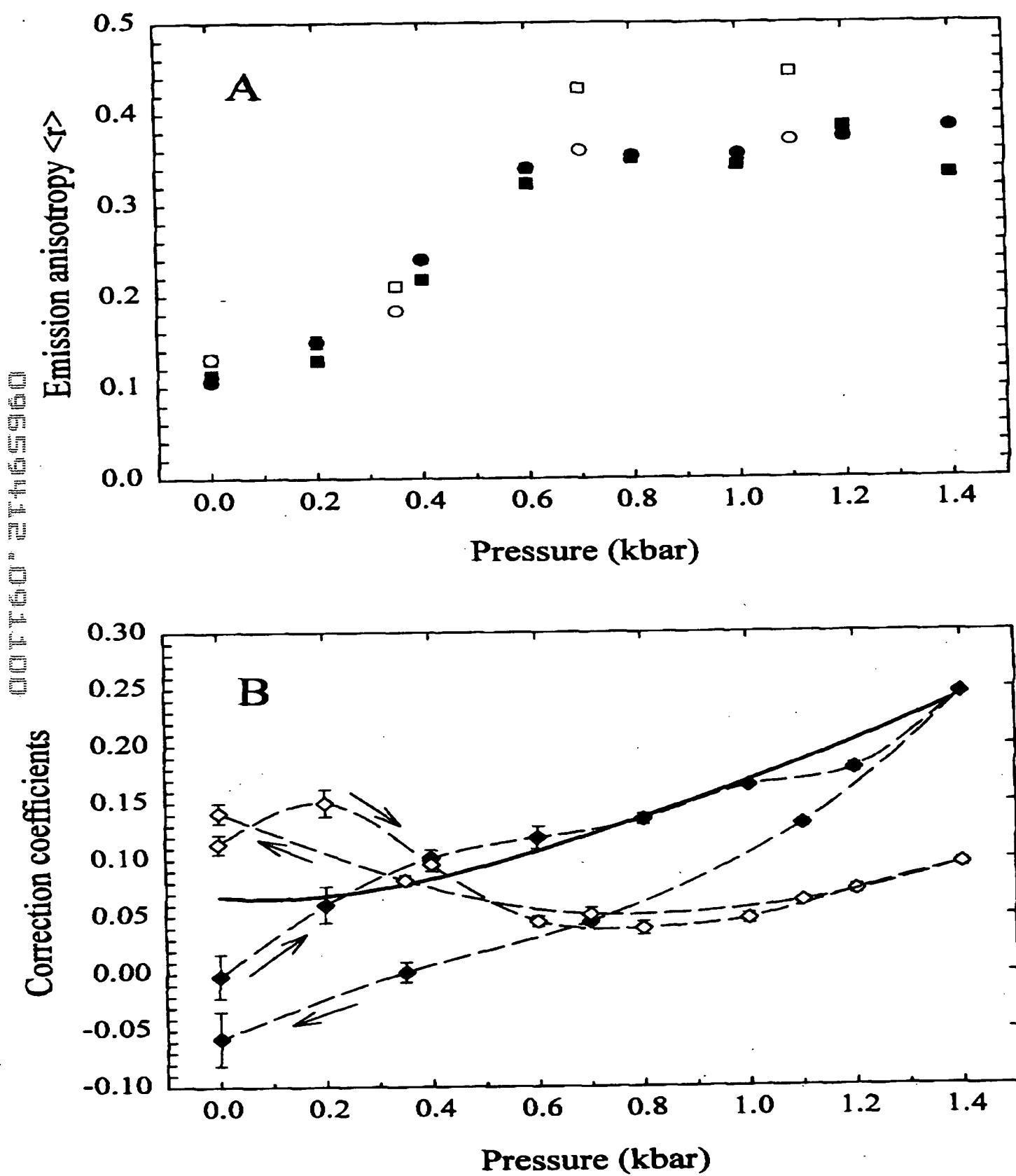


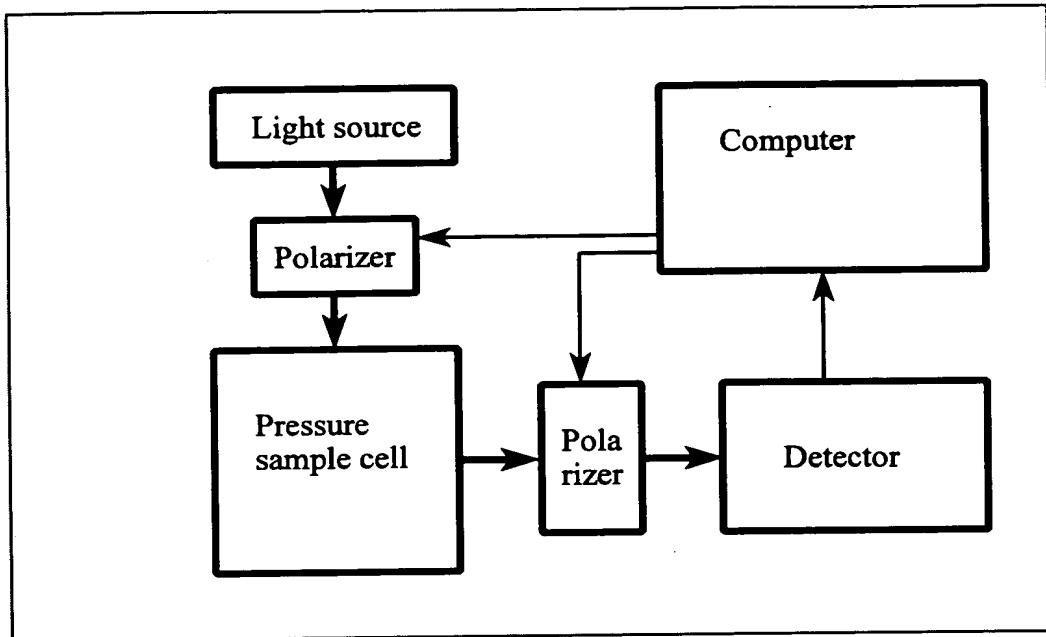
FIGURE 5A

Method of total intensity measurement	Excitation	Emission	$\langle r \rangle$	Obtained intensity of fluorescence at	Comments
1	photocurrent	fixed vertical polarizer	no polarizer	$X(p=1\text{ bar})=0$ $Y(p=1\text{ bar})=0$	$X(p=1.4\text{ kbar})=0.25$ $Y(p=1.4\text{ kbar})=0.10$
2	photocurrent	unpolarized light	no polarizer	0.1 0.36	0.92 1.014
3	Magic angle, Method 1	fixed vertical polarizer	fixed polarizer at 55° to vertical	0.1 0.36	0.997 Less instrument dependent, but true non-polarized light is difficult to obtain
4	Magic angle, Method 2	fixed polarizer at 55° to vertical	fixed vertical polarizer	0.1 0.36	0.983 Recommended for non-pressure experiments
5	Magic angle, Method 3	depolarized light	fixed polarizer at 55° to horizontal	0.1 0.36	1.013 Recommended for non-pressure experiments
6	Magic angle, Method 4	fixed polarizer at 55° to horizontal	scrambling plate	0.1 0.26	0.995 Recommended for non-pressure experiments, but true non-polarized light is difficult to obtain
7	calculated with formula: $G \cdot i_{VV} + 2 \cdot i_{VH}$	fixed vertical polarizer	rotating polarizer	0.1 0.36	0.98 0.94 Recommended for non-pressure experiments, G must be known

Method of total intensity measurement	Excitation	Emission	< <i>r</i> >	Obtained intensity of fluorescence at		Comments
				<i>X</i> (<i>p</i> =1 bar)=0 <i>Y</i> (<i>p</i> =1 bar)=0	<i>X</i> (<i>p</i> =1.4 kbar)=0.25 <i>Y</i> (<i>p</i> =1.4 kbar)=0.10	
8 calculated with formula: $\frac{I_{HH}}{I_{HV}} \cdot i_{VV} + 2 \cdot i_{VH}$	rotating polarizer	rotating polarizer	0.1	1.00	0.96	Recommended for non-pressure experiments, definitely wrong for pressure domain
9 Calculated with equation (6)	rotating polarizer	rotating polarizer	0.36	1.00	0.83	Recommended for pressure domain experiments, <i>G</i> and <i>E</i> factors must be known

FIGURE 5B

Figure 6



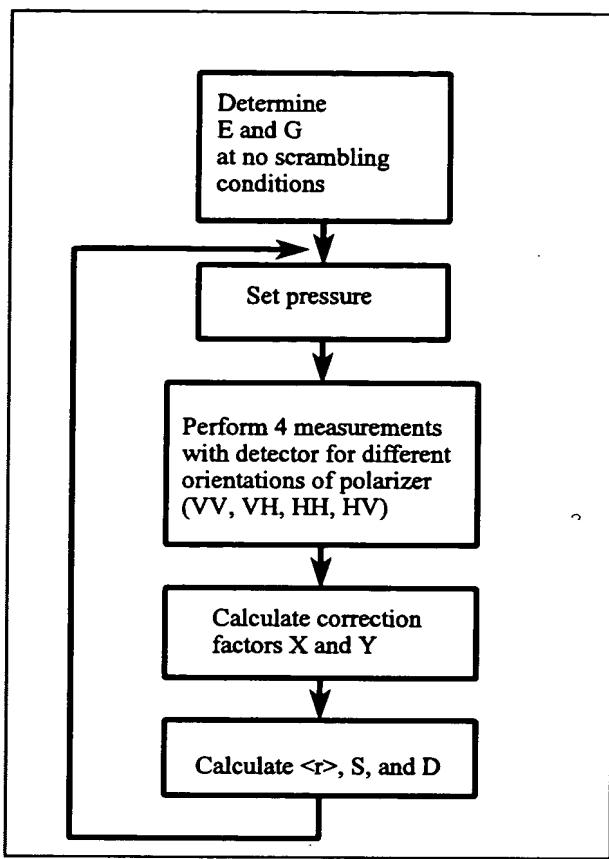


Figure 7